

**MEMO** Published September 8, 2014 · 4 minute read

## 13 Questions for the Nuclear Regulatory Commission Nominees



President Obama nominated Stephen Burns and Jeff Baran as Nuclear Regulatory Commissioners. Nuclear energy is at a critical crossroads in the U.S. The Environmental Protection Agency has recognized it as a key tool to mitigate climate change and continue providing diverse and reliable sources of clean energy to the U.S. power grid. However, faced with market challenges and the absence of a national energy strategy, several plants are closing.

Keeping plants operating, constructing new plants, and developing advanced nuclear technologies are key to helping the U.S. maintain a leadership position in the international nuclear industry. These are important issues that will certainly come before the next NRC commissioners. To that end, Third Way hopes Congress considers the following questions as Burns and Baran proceed through the nomination process:

### **Nuclear Energy and The Climate**

In its recent greenhouse gas rules, the Environmental Protection Agency underscored the role nuclear plays in providing clean, greenhouse-gas free electricity. What role could and should the NRC play to maintain the role of nuclear energy as a key part of a climate strategy in the U.S.?

## Advanced Nuclear Technologies Licensing

The NRC's current regulatory framework is geared towards operating light water reactors. To treat non-light water or non-operating reactors differently requires the licensee to apply for myriad "exemptions," which are costly and time consuming to request and process, and cause unnecessary political controversy. Would you consider the formulation of

new regulatory guidance that can be applied to advanced designs? Will you seek to redirect NRC discretionary resources to that end?

Under the current licensing regime, an investor must submit the entire application upfront. This means fully funding the licensing process and detailed engineering before receiving a regulatory ruling. By contrast, the Food and Drug Administration uses a phased regulatory process that is better for the private sector. Would you support the concept of a licensing process with discreet steps that will enable a more systematic de-risking of investment in nuclear plants? How would you like to see the process proceed in order to remove levels of protracted uncertainty over time?

Developing new frameworks will be time-consuming and complex. Would you support providing some staff input to an independent effort to develop a proposed framework for a risk-informed, staged licensing process for advanced reactors?

### **Prototypes**

Increasingly, there is a push to let private industry bear more of the RD&D responsibility for developing new nuclear technologies, but a regulatory solution is not obvious. While DOE has traditionally funded, oversaw and built nuclear R&D and demonstration plants, it is hesitant to take oversight authority for private projects. However, the NRC is not currently well equipped to regulate prototype reactors either, particularly if they are designed to sell any electric power or irradiation services to offset their costs. Would you support the NRC development of regulations to allow industry-supported prototype and experimental advanced reactors if adequate resources could be obtained?

# Existing and Future Nuclear Extending Licenses

By 2035, one third of U.S. nuclear reactors will be older than 60 years. How do you see the Nuclear Regulatory

Commission's role in determining whether or not the lives of these plants can be extended? What factors will be considered when deciding if those reactors are capable of operating safely?

#### **Small Modular Reactors**

The NRC has published a 39-month schedule for small modular reactor design certification reviews. In order to achieve this schedule, the NRC has said that all policy, technical and licensing issues must be resolved prior to submittal of the application. How will you ensure that the NRC has sufficient resources, and does everything it can, to work with prospective licensees far in advance of its application submittal to adhere to the 39-month schedule?

#### **New Plants**

Licensing a new nuclear plant is time consuming for the applicant and the NRC. At the same time, it is important that it is done right. As an NRC commissioner, what strategies would you pursue to streamline the application process while maintaining rigorous safety standards?

### **Waste Storage**

The NRC recently approved a generic environmental impact statement that permits nuclear waste to be stored indefinitely, despite an international consensus and efforts toward geologic disposal. As the challenge of nuclear waste management continues to grow, what policies can be made to ensure that the licensing process for advanced reactors, capable of managing this waste, is better managed?

## **International Cooperation**

Will you support efforts to harmonize regulations internationally where possible without lowering U.S. standards—so that vendors who have a design license in one country can obtain a license in another with less delay and expense?

Do you support the creation of international standard designs that can be rapidly reviewed and approved and more effectively monitored over their lifetime?

Would you encourage the NRC to evaluate foreign test facilities in a risk-informed way to enable the use of data collected at those facilities by U.S. license applicants who do not have access to similar facilities in the U.S.?

There are a variety of international acceptance standards for nuclear power plants. What do you see as NRC's opportunity to take a more effective leadership role to reconcile and rationalize radiological safety in the ever-diversifying global nuclear market?

**TOPICS** 

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